

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/770,917	-	02/03/2004	Arturo Mastelli	71312-0002	1695
35161	7590	06/23/2004		EXAMINER	
DICKINSC 1901 L. STR			KATCHEVES, BASIL S		
SUITE 800 WASHINGTON, DC 20036				ART UNIT	PAPER NUMBER
				3635	
				DATE MAIL ED. 06/22/2004	1

Please find below and/or attached an Office communication concerning this application or proceeding.

	Action Summary	Part of Paper No./Mail Date 061004				
Attachment(s) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date	4) Interview Summar Paper No(s)/Mail D 8) 5) Notice of Informal 6) Other:	y (PTO-413) Date Patent Application (PTO-152)				
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the principle application from the International Bure * See the attached detailed Office action for a list	nts have been received. nts have been received in Applica iority documents have been receiv au (PCT Rule 17.2(a)).	tion No ved in this National Stage				
Priority under 35 U.S.C. § 119						
Application Papers 9)☐ The specification is objected to by the Examin 10)☒ The drawing(s) filed on 03 February 2004 is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11)☐ The oath or declaration is objected to by the Including the correct 11.	are: a)⊠ accepted or b)⊡ object ne drawing(s) be held in abeyance. Se ection is required if the drawing(s) is o	ee 37 CFR 1.85(a). bjected to. See 37 CFR 1.121(d).				
8) Claim(s) are subject to restriction and	or election requirement.					
5) ☐ Claim(s) is/are allowed. 6) ☑ Claim(s) <u>1-15</u> is/are rejected. 7) ☐ Claim(s) is/are objected to.						
 4) Claim(s) 1-15 is/are pending in the application 4a) Of the above claim(s) is/are withdrel 						
Disposition of Claims						
closed in accordance with the practice under	r Ex parte Quayle, 1935 C.D. 11, 4	153 O.G. 213.				
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
1) Responsive to communication(s) filed on <u>03</u>	February 2004					
THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR of after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a recommendation of the period for reply is specified above, the maximum statutory perions Failure to reply within the set or extended period for reply will, by statue to the period for reply will, by statue to the period for reply will, by statue to the period patent term adjustment. See 37 CFR 1.704(b). Status	1.136(a). In no event, however, may a reply be to a sply within the statutory minimum of thirty (30) do will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDON	nys will be considered timely. m the mailing date of this communication. ED (35 U.S.C. & 133)				
A SHORTENED STATUTORY PERIOD FOR REP		I(S) FROM				
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet with the	correspondence address				
	Basil Katcheves	3635				
Office Action Summary	10/770,917 Examiner	MASTELLI, ARTURO Art Unit				
	Application No.	Applicant(s)				

Art Unit: 3635

DETAILED ACTION

Claim Objections

Claim 5 recites the limitation "the perimeter" in line 1 and "the space" in line 2.

There is insufficient antecedent basis for these limitations in the claim.

Claim 6 recites the limitation "the upper edge" in line 1 and "the lower ledge" in line 4. There is insufficient antecedent basis for these limitations in the claim.

Claim 7 recites the limitation "the space" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 appears to be missing a "," between the word "tiles" and the word "gasket" in line 1. Clarification is required.

Claim 14 recites the limitation "the perimeter" in line 3. There is insufficient antecedent basis for this limitation in the claim.

·海西山 (1800年),1917年(1918年),1918年(1918年),1918年,1918年,1918年,1918年,1918年,1918年,1918年,1918年,1918年,1918年,1918年,1918年 1918年 - 1918年

Art Unit: 3635

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 2,724,465 to Krauss et al in view of U.S. Patent No. 4,506,482 to Pracht et al.

Regarding claims 1, Krauss discloses a curtain wall structure having a framework with a series of panels (fig. 6). Krauss also discloses an insulating panel (fig. 6: 42) being flush with the frame (fig 6: 50). Krauss also discloses an outer tile (fig. 6: U) which is secured to the insulating panel and to the frame. However, Krauss does not disclose tiles adhered to the panels with silicone. Pracht discloses tiles adhered with silicon (column 1, line 50) to a building wall (abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Krauss by adhering tiles in order to improve the aesthetics and make a better bond to the panel.

Regarding claim 2, Krauss discloses the panel as having an edge with angles (fig. 6: see bottom perpendicular edge of 42).

Regarding claim 3, Krauss discloses the panels as being on the same plane as the front surface of the frame (fig. 6, see face of panel 42).

Art Unit: 3635

Regarding claim 4, Krauss discloses the use of fasteners to secure the panels to the frame (fig. 15: 99).

Regarding claim 5, Krauss in view of Pracht discloses the use of a silicon sealant under the tiles, thus placing it between the tiles and frame.

Regarding claim 6, Krauss discloses top and bottom retainers for securing the tiles to the frame (fig. 6: 40 & 48).

Regarding claim 7, Krauss in view of Pracht discloses the use of a silicon sealant under the tiles thus placing it between the tiles and frame.

Regarding claim 8, Krauss discloses the size of the panels as being substantially the same as the size of the frame openings (fig. 6) and the tiles as being larger than the frame opening (fig 6: U compared to 42).

Regarding claims 9, Krauss in view of Pracht discloses the basic claim structure of the instant application but does not disclose specific thickness. It would have been an obvious design choice to vary the thickness of tiles and panels in order to decrease or increase the curtain wall weight and strength.

Regarding claim 10, Krauss discloses the panels as having an edge portion (fig. 6: see bottom of 42) that has a rearward dimension that is greater than the thickness of the tile (fig. 6:U).

Regarding claim 11, Pracht discloses the use of ceramic tiles (column 2, line 53).

Regarding claim 12, Krauss in view of Pracht discloses the basic claim structure of the instant application but does not disclose specific dimensions. It would have been

Art Unit: 3635

an obvious design choice to vary the widths of tiles and panels in order to decrease or increase the curtain wall weight and strength.

Regarding claims 13, Krauss discloses a curtain wall structure having a framework with a series of panels (fig. 6). Krauss also discloses a panel (fig. 6: 42) being flush with the frame (fig 6: 50) and substantially the same size as the frame openings. Krauss also discloses the panel as having an edge (fig. 6: bottom of 42) as extending normal to the plane of the front frame surface. Krauss also discloses an outer tile (fig. 6: U) which is secured to the insulating panel and to the frame. However, Krauss does not disclose tiles adhered to the panels with silicone. Pracht discloses tiles adhered with silicon (column 1, line 50) to a building wall (abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Krauss by adhering tiles in order to improve the aesthetics and make a better bond to the panel.

Regarding claim 14, Krauss discloses the tiles as being larger than the openings and also discloses the panels as being connected to the frame along the perimeter (fig. 15: where 94 points). However, Krauss does not disclose the panels as being larger than the frame openings. Pracht discloses panels as being larger than frame openings (fig. 10: 67). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Krauss by using a panel of larger size than the pening, as disclosed by Pracht, in order to create a tighter, weather proof seal.

Regarding claims 15, Krauss discloses providing a curtain wall structure having a framework with a series of panels (fig. 6). Krauss also discloses the panel (fig. 6: 42) as

Art Unit: 3635

being flush with the frame (fig 6: 50) and substantially the same size as the frame openings. Krauss also discloses the panel as having an edge (fig. 6: bottom of 42) as extending normal to the plane of the front frame surface. Krauss also discloses an outer tile (fig. 6: U) which is secured to the insulating panel and to the frame. However, Krauss does not disclose tiles adhered to the panels with silicone. Pracht discloses tiles adhered with silicon (column 1, line 50) to a building wall (abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Krauss by adhering tiles in order to improve the aesthetics and make a better bond to the panel. Krauss does not specifically mention a light weight panel. However, the panel may be made "light weight" when made with a "light weight" aggregate.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The cited patents listed on the included form PTO-892 further show the state of the art with respect to curtain walls in general.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Basil Katcheves whose telephone number is (703) 306-0232. The examiner can normally be reached on Monday-Friday from 7:30 am to 4:00 pm.

Art Unit: 3635

Page 7

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Friedman, can be reached at (703) 308-0832.

BK

6/10/04

Basil Katcheves

Examiner AU 3635